

Informational Handout Document to Project Construction Contract Documents:

RAILROAD RELATIONS AND INSURANCE REQUIREMENTS

1.01 GENERAL

This work shall consist of all work, time, and materials that are necessary to coordinate with PCJPB for the duration of the project as shown on the plans, as specified in these special provisions and as directed by the Engineer.

A Right of Entry Permit Agreement from the Peninsula Corridor Joint Powers Board (PCJPB), will be required for construction within the railroad right-of-way. Contractor shall execute a Right of Entry Permit Agreement (Agreement) with the PCJPB and shall abide by the requirements therein. A sample of the Agreement and associated exhibits are attached hereto for reference. As used in the Right of Entry Permit Agreement, unless the context otherwise requires, the terms used in the Agreement shall have the following meanings:

Permittor.—The term "Permittor" as used in the Right of Entry Permit Agreement includes, in addition to the Peninsula Corridor Joint Powers Board (PCJPB), the City and County of San Francisco, the County of San Mateo, the County of Santa Clara Transit District, the San Mateo County Transit District, the Union Pacific Railroad Company and the National Railroad Passenger Corporation, the City of South San Francisco, the State of California, and the assigns of any of them.

Permittee.—The term "Permittee" as used in the Right of Entry Permit Agreement means the Contractor and his Subcontractor(s), their agents, employees and invitees.

It is expected that the PCJPB will cooperate with the Contractor to the end that the work may be handled in an efficient manner. However, except for the additional compensation provided for hereinafter for delays in completion of specific unit of work to be performed by the PCJPB, and except as provided in Public Contracts Code Section 7102, the Contractor shall have no claim for damages, extension of time, or extra compensation in the event his work is held up by railroad train operations or other work performed by PCJPB.

In addition, Exhibit C-2, "Insurance Terms," of the Right of Entry Permit Agreement, the following parties shall be added as Indemnitees and named as additional insureds: the Peninsula Corridor Joint Powers Board, the City and County of San Francisco, the Santa Clara Valley Transportation Authority, the San Mateo County Transit District, the Union Pacific Railroad Company, the National Railroad Passenger Corporation and their respective directors, officers, employees, volunteers and agents while acting in such capacity, and their successors or assignees, as they now, or as they may hereafter be constituted, singly, jointly or severally.

Work in and adjacent to PCJPB's right-of-way shall require close cooperation with and approval by PCJPB. No work shall commence upon PCJPB's property until the Right of entry Agreement has been executed between PCJPB and the Contractor, proper insurance certificates are provided and approved, and a PCJPB approved Weekly Site Specific Work Plan (WSSWP), attached to Exhibit C, is received by

the Contractor. All work within and adjacent to the Operating Envelope shall be performed in accordance with PCJPB's, "Operating System Interface" (OSI), which is attached as Exhibit C to the Right of Entry Agreement for reference.

In addition to complying with requirements of PCJPB's OSI, additional restrictions may be imposed on the Contractor's work in and adjacent to PCJPB right-of-way. There are several PCJPB construction projects occurring simultaneously along PCJPB's railroad corridor between the Counties of San Mateo, San Francisco, and Santa Clara therefore PCJPB may need to further restrict Contractor's operations. These additional restrictions shall be based on ongoing review of actual progress on various projects. Actual working hours available will be provided to the Contractor during construction. Contractor shall have no claim for damage or compensation for any delay or hindrance as a result of additional restrictions imposed by PCJPB to the Contractor's construction operations within or adjacent to the railroad right of way.

Full compensation for obtaining the PCJPB Right of Entry Agreement, including payment of approximate \$1500.00 fee and the cost of premiums for obtaining PCJPB required insurance and bonding; coordination with PCJPB as required by Agreement; and all necessary tools, equipment, labor, materials and incidentals required by compliance with this section of the special provisions shall be borne by the Contractor at its own expense and shall be considered as included in the various items of work to be performed on or over the PCJPB right-of-way and no separate payment or additional compensation will be allowed therefore.

Contractor shall comply with the latest revision of the PCJPB's Standards, which are available at: www.caltrain.com/engineeringstandards.

All excavation shoring plans, falsework plans and their structural calculations shall be prepared, stamped, and signed by a valid California Professional Engineer licensed in Civil Engineering with a minimum of 5 years of experience specializing in the design of shoring subjected to railroad loading, falsework constructed adjacent to live railroad traffic, or shall be a registered California Professional Engineer licensed to use the title "Structural Engineer". Review and approval of shoring plans will be performed by the PCJPB at the expense of the State of California, Department of Transportation (Caltrans).

The PCJPB will relocate their existing underground signal wires or overhead communication cables as may be required to accommodate construction.

The Contractor shall submit a WSSWP as required by the PCJPB prior to the beginning of any excavation work on the PCJPB right of way. The WSSWP shall be submitted to the Engineer and shall provide sufficient detail of the work plan (to include limits of excavation) so that PCJPB can relocate existing underground wires to a safe location.

All Contractor submittals and communications required by the PCJPB, except those required to execute the Agreement, shall be submitted directly to the Engineer. The Engineer will then transmit the appropriate submittals to the PCJPB for coordination with the PCJPB for submittal review, comment and approvals. The Engineer will return all submittals to the Contractor after PCJPB consideration. Submittals for items related to PCJPB work or which may impact PCJPB's facilities shall require an extended review cycle (minimum 45 days) to allow PCJPB to review.

The Contractor shall comply with all requirements of the PCJPB while performing work on PCJPB right-of-way and in addition shall comply with the following specific requirements as follows:

1. As required by the Operating Systems Interface, all Contractor employees are required to have successfully completed within the last 12 months a PCJPB Roadway Worker Protection (RWP) training program before entering onto PCJPB right-of-way. Employees completing the program will be given a sticker to be displayed on their hardhats while working on or over the right-of-way. For arrangement of this training, Contractor shall contact the following PCJPB Safety Officer, (650) 826-1868.
2. The Contractor shall take protective measures necessary to keep PCJPB facilities, including track ballast, free of sand or debris resulting from construction operations and activities. Any damage to PCJPB facilities resulting from Contractor's operations will be repaired or replaced by the PCJPB and the cost of such repairs or replacement shall be the responsibility of the Contractor.
3. The Contractor's submittals as required by the Right of Entry Permit Agreement are outlined in Exhibit C-1, "Working Procedures", and shall conform to the requirements therein for preparation and submittal of required Work Plans (WP's) and detailed plans and calculations for shoring. The intent of this paragraph is to have working drawings prepared and submitted which provide the PCJPB with location and general details concerning construction activities and temporary construction facilities and operations. After approval of these working drawings Contractor shall then prepare WSSWP's as required by PCJPB for approval prior to performing specific construction activities. As part of the approval process for Weekly Site Specific Work Plans (WSSWP), the Contractor must submit details and staging plans and calculations to the PCJPB for any work which can impact the PCJPB's operations. For example bore and jack operations below PCJPB's operating system shall require staging plans as part of the WSSWP, showing how each portion of the work is sequenced and accomplished during Passenger Non-Revenue Hours approved by PCJPB. This type of work shall only be performed when there are no trains operating.
4. The Contractor shall provide temporary fencing at the end of each working day where existing fencing is removed in connection with the Contractor's operations. Fencing shall remain in place until all work is complete and removal is approved by the Engineer. It is the intent of providing the temporary fence that Contractor shall not cross the tracks to perform work on the other side of the tracks. The Contractor shall use existing public crossings of the right-of-way for purposes of moving personnel, tools, materials and equipment to the other side of the tracks and right-of-way. When construction is complete within the railroad right of way, the Contractor shall replace the fencing where existing fencing has been removed during construction. Replacement fencing shall be in accordance to the provisions in Section 15-2.04, "Reconstruction," of the State of California, Department of Transportation, 2010 Standard Specifications. Full compensation for replacing fence shall be considered as included in the contract prices paid for the various items of work involved and no separate payment will be made therefor.
5. The CONTRACTOR is directed to the latest Caltrain schedule titled "Caltrain Timetable" for exact hours of operations for commuter train service. Train timetable is available at Samtrans, 1250 San Carlos Ave., Suite 355, San Carlos, CA, most any Caltrain train station or on the internet.

The timetable, however, does not include operations of UPRR freight train service and PCJPB work trains mainly during night time (Passenger Non-Revenue) hours. PCJPB will coordinate and approve the Contractor 's work during periods of freight train and PCJPB work trains operations through the WSSWP process.

The Contractor 's work to be done during Passenger Non-Revenue hours will have to be coordinated with freight train and PCJPB work trains operations. All work to be done during Non-Revenue hours must allow for passage of freight trains and PCJPB work trains unless special permission has been granted by PCJPB through the WSSWP process. When freight trains are scheduled to pass through the project area all construction must stop until the train has cleared the area and the flagger permits construction to restart.

All work within PCJPB right-of-way is subject to final inspection and approval by PCJPB staff. PCJPB will provide such staff at the expense of Caltrans.

Within the terms of the Agreement are provisions for enforcement of liquidated damages against the Contractor should it cause delay to PCJPB commuter train operations.

Full compensation for furnishing all labor, materials, tools, equipment and materials for doing all work required for coordinating with the railroad, meeting requirements, obtaining permits and paying fees shall be included in the contract prices paid for various items of work that require railroad coordination and no additional compensation will be allowed therefor.



Exhibit C
OPERATING SYSTEM INTERFACE (OSI)
(Third Party)

PART 1 - GENERAL

1.01 DESCRIPTION

Outline for Contractor's interface with Caltrain's operating system, including track work, train control, and communications.

1.02 DEFINITIONS

- A. Caltrain:** The Peninsula Corridor Joint Powers Board (PCJPB) is a public agency comprised of three counties; San Francisco, San Mateo and Santa Clara, and is otherwise known as Caltrain.
- B. Amtrak:** Under contract with the PCJPB to operate and maintain the Caltrain system.
- C. Operating System:** Includes but is not limited to the tracks on which trains and on-track equipment operate or may potentially operate, and in addition any facilities closely related to the operation of the railroad system including signal and communication masts, bridges, poles, cables, signal houses, tunnels, culverts, grade crossings and station platforms and facilities.
- D. Operating Envelope:** Anywhere inside the Caltrain operating corridor but at the minimum twenty-five (25) feet from the centerline of the nearest track. This includes any area that is an essential component of the operating system.
- E. Work Window:** A designated period of time with a specific beginning and ending time for which the track, signals, bridges and other Operating System elements within the Operating Envelope are modified or temporarily removed from service to allow construction or maintenance work to occur. Written authority from Caltrain, and an approved Weekly Site Specific Work Plan (WSSWP), is required before a Contractor is granted a Work Window. The Contractor's Work Window shall have specific geographic limits, which are defined in the approved WSSWP. Modifications or suspension of train and on-track equipment movements resulting from a Work Window involves written changes to the Railroad's Rules of Train and On-Track Equipment Operations. These written changes are known as Track Bulletins and are categorized as follows.
 - (a) **Double Track Window:** An approved Work window in which passenger/ commuter and freight train service on two adjacent main tracks is suspended or halted. However, trains and on-track equipment associated with construction and maintenance activities may still operate on the tracks with suspended service but subject to the control of the Employee-in-Charge/ Flagman. Within rail corridors with three or more main tracks passenger/ commuter and freight train service may operate on the remaining main tracks subject to "Form B" restrictions. A "Form C"

Track Bulletin will be issued by the Owner's Railroad Contract Operator/ Operating Railroad of Record to suspend or modify the train service on the two adjacent main tracks.

- (b) Single Track Window: An approved Work Window in which passenger/ commuter and freight service on a single main track is suspended or halted. However, trains and on-track equipment associated with construction and maintenance activities may still operate on the single main track with suspended service subject to the control of the Employee-in-Charge/ Flagman. Additionally, passenger/ commuter and freight train service will operate on the single main track or main tracks remaining in service subject to "Form B" restrictions. A "Form C" Track Bulletin will be issued by the Owner's Railroad Contract Operator/ Operating Railroad of Record to suspend or modify the train service on the single main track removed from service. The limits of Single Track Windows will be a segment of track situated between the two nearest crossovers (universal or single). Single Track Windows within a track segment will not be allowed to extend beyond the limits of the two nearest crossovers, and in the case of more than one Single Track Window construction work will not be allowed on two adjacent track segments.
- (c) "Form B" Work Window: An approved Work Window in which passenger/ commuter, freight and all other trains and on-track equipment movements can be prohibited from entering the defined limits of a segment of track. The "Form B" Work Window does not allow the Contractor to remove from service or modify the tracks, signals, bridges, stations or other elements of the Operating System in a manner which will delay or in any way affect the safe operation of the trains. The "Form B" Work Window allows the Contractor the ability to enter the Operating Envelope and perform construction activities subject to the conditions above. An Employee-in-Charge/ Flagman from the Contract Operator will exercise strict control over the Contractor's construction activities in conjunction with Roadway Worker Protection requirement to assure that the Contractor's activities do not delay or impact train service.
- (d) "Track and Time": A period of time on a particular segment of track for which the Control Operator (Train Dispatcher) grants exclusive usage to a qualified employee of the Railroad.
- (e) Track and Time will be granted by the Control Operator specifying the authority number, track limits and time. An employee (Flagman) granted Track and Time may occupy a track or tracks within the specified limits for the time period authorized. The limits of Track and Time are normally designated by Control Points (CPs). Track and Time is not normally used to protect work or trains for extended periods of time unless there are no other means readily available to do so.
- (f) Exclusive Track Occupancy: This refers to a method, such as those above, of establishing working limits on controlled track in which movement authority of trains and other equipment is withheld by the Control Operator or Train Dispatcher or restricted by a Flagman.

- F. Work Plan (WP):** A document submitted by the Contractor, detailing the activities associated with a particular element of work. The Work Plan must include a description of the activity as well as the number of men and a list of the equipment required in the performance of the activity.
- G. Weekly Site Specific Work Plan (WSSWP):** A program, plan, and schedule prepared and submitted by the Contractor and approved by the Engineer that accurately describes and illustrates the manner in which Work within the Operating Envelope will be accomplished, the impacts on any elements of the Operating System and the manner in which Work will be accomplished with the allotted Work Windows.
- H. Engineer:** Caltrain Engineer or authorized representative.

1.03 WORK PLAN (WP)

- A.** The Contractor will prepare a detailed Work Plan for each and every task associated with the work that is required by the Contract or any associated Field Instructions or Change Notices.
- B.** WP's shall include all activities necessary to perform construction tasks within the PCJPB Right of Way, including use of stations, sidings, temporary construction easements and proposed storage areas.
- C.** WP's shall include a description of any proposed changes to the Operating System between start and finish of the work, including any requested Work Windows.
- D.** The WP shall conform to all other requirements applicable to the Contract Documents.
- E.** The WP must contain a basic schedule of the work showing each activity and where and how it affects normal operation of the Operating System. Each activity in the plan shall include all labor, materials and equipment required to complete the activity within the PCJPB allotted time period.
- F.** The WP must include Contingency Plans for putting the Operating System back in operation in case of an emergency or in case the Contractor fails to complete the work within the Work Window. The Contingency Plans shall address the various stages of activities to restore the System.
- G.** The WP's must be of sufficient detail, clarity and organization to permit efficient review by the Engineer and approval at least 10 calendar days before the proposed work is performed. The WP shall be submitted to the Engineer as follows.
 - a) At least 21 calendar days prior to start of the subject work within the PCJPB Right of Way for work other than signal and overhead wire installation.

- b) At least 30 calendar days prior to the start of the work for work involving signal and overhead wire installation, such as signal system cutover, overhead wire involving third parties, etc.
- H. The Engineer may request explanations and changes to the WP to ensure that it conforms to the requirements of the Contract Documents. If the WP is not acceptable, Contractor shall revise the WP to make it acceptable. The Contractor is responsible for submitting a revised WP that can be reviewed and approved by the Engineer at least seven (7) days in advance of any work within PCJPB Right of Way.
- I. The Contractor will be informed if the WP is acceptable not less than seven (7) calendar days prior to the scheduled start of work within the PCJPB Right of Way. Once the plan is accepted, Contractor shall muster the resources necessary to perform the work represented by the WSSWP, so that necessary resources are available and ready for use, in general on the day which begins the week in which the work is to be accomplished. At this time, the Engineer will make a final decision as to whether or not the work is to proceed as planned or will be canceled. The prime consideration will be the stage of readiness of the Contractor, which the Contractor shall demonstrate to the Engineer.

1.04 WEEKLY SITE SPECIFIC WORK PLAN (WSSWP) Copy Included

- A. In addition to Work Plans, the Contractor shall submit a a Weekly Site Specific Work Plan (WSSWP) on a weekly basis. All WSSWP's shall detail the proposed weekly events and activities, and include the Contractor's request for Work Windows. Approval of a WP or WSSWP by the Engineer may require the placement of an appropriate protective divider (k-rail, snow fence, etc.) between construction operations and the operating system. Contractor shall furnish and install protective dividers as specified by the Engineer.
- B. The Contractor shall furnish all labor, materials, and equipment as required to perform and complete the work within the approved work window. The Contractor shall maintain the approved schedule in the WSSWP.
- C. All work outlined in the WSSWP with a potential to impact normal functioning of any part of the operating system shall include a detailed schedule of events indicating the expected hourly progress of each activity that has a duration of one hour or longer. The schedule shall include a time at which all activities planned under the WSSWP will be completed. The WSSWP shall also include the mobile phone numbers of individuals responsible for compliance with the approved WSSWP. Failure of the Contractor to complete the scheduled activities by the planned time or to put in place an approved contingency plan may adversely impact the operations of Caltrain. In the event that Caltrain service is delayed by Contractor's actions, damage will be incurred. Liquidated damages will be assessed as described in Exhibit C-1 Working Procedures.
- D. The WSSWP shall be a plan that describes the activities necessary to perform the work within the Operating Envelope and indicates which Work Plans will be utilized. The plan shall explain each activity along with the proposed schedule to complete each item. Each activity in the plan shall include all material and equipment required to complete the activity within the scheduled time period.

- E. The WSSWP shall also include contingency plans for putting the system back in operation in case of an emergency or in case the Contractor fails to perform and complete the work on time. Contingency plans shall address the various stages of construction.
 - F. The contractor shall have a copy of the current Caltrain schedule. Schedules are available at Caltrain Stations or on the Internet at www.caltrain.com.
 - G. The WSSWP will be submitted to the Engineer for review no later than the opening of the business day on the Monday two (2) weeks before the proposed start of work within the Caltrain property. The Engineer may request explanations and changes to the SSWP, if the plan is not acceptable, the Contractor shall revise the plan accordingly.
 - H. The Contractor will be informed if the WSSWP is acceptable not less than three (3) calendar days prior to the scheduled start of work. Once the plan is accepted, the Contractor will be prepared to perform the work represented by the WSSWP.
 - I. References herein to weeks mean the week starting with Monday, and the next six (6) days of the proposed work schedule.
 - J. All work within Caltrain's property requires an WSSWP approval by Caltrain.
 - K. No work will be permitted during weekday commute hours less than fifteen (15) feet horizontally from of the nearest rail until after 9:00 AM and prior to 3:00 PM. Work closer than fifteen (15) feet from the nearest rail may require a night or weekend schedule. Some work performed more than fifteen (15) feet horizontally from the nearest rail may be restricted to night and weekends when so required by the approved WSSWP.
 - L. Materials and equipment shall not be piled, stored or parked when not in use closer than twenty-five (25) feet horizontally from the centerline of the nearest operating track.
 - M. The placement of piles, forms, braces, shoring, falsework or other construction supports shall be in accordance with the current State of California, Department of Transportation (Caltrans) Falsework Manual, PCJPB Standards Volumes 1 and 2, PCJPB Engineering Standards for Excavation Support Systems, and PUC General Orders 26-D and 118 as applicable. Temporary overhead structures shall have a minimum vertical clearance of twenty-two (22) feet, six (6) inches above top of rail for all tracks and at any location under the structure. Temporary overhead structures with proposed vertical clearance less than twenty-two (22) feet, six (6) inches above top of rail must have an exemption from the California Public Utilities Commission (CPUC) and approval of Caltrain.
 - N. In general, open excavation areas shall be protected per OSHA regulations. Open excavation areas adjacent to operating tracks shall be protected by walkways with handrails no closer than eight (8) feet, six (6) inches horizontally from the nearest operating track, if tangent, and nine (9) feet, six (6) inches if track is curved.
- B. 1.05 AVAILABILITY OF ACTIVE TRACKS: .**
- A. Exception: activities that have the potential to impact train operations and safety may be performed during work windows as shown in the chart(s) in Attachment A, "Work Windows". Active main line tracks and sidings are only available during work windows as shown on the Work Window chart and as approved by the Engineer.
 - B. The Contractor does not have exclusive rights to the Work Windows. The Contractor must share these Work Windows with other Contractors and current Owner's Contract Operator.

- C. Track bulletins will begin not earlier than fifteen (15) days after the effective date of the Notice to Proceed (NTP).

1.06 CURRENT AND FUTURE CORRIDOR TRAFFIC

The following is a general summary of train traffic in the rail corridor:

- A. Mainline - Current Owner Commuter Operations and UPRR freight traffic
1. Weekday train service, both directions
 - Caltrain commute service per current timetable
 - 4 to 6 UPRR freight trains between 9 PM to 4 AM
 2. Saturday train service, both directions
 - Caltrain commute service per current timetable
 - 2 to 3 UPRR freight trains
 3. Sunday train service, both directions
 - Caltrain commute service per current timetable
 - 2 to 3 UPRR freight trains
 4. Special Event Service
 - 3 to 4 trains each direction on days of San Francisco Giants Baseball home games
 - 3 to 4 trains each direction on days of Stanford Football home games
 - 3 to 4 trains each direction for other special events occurring yearly as follows:
 - o January – 3 events
 - o February – 2 events
 - o May – 2 events
 - o June – 1 event
 - o July – 2 events
 - o November – 2 events
 - o December – 4 events
 5. Other passenger rail carriers in accordance with their published timetables, including but not limited to Amtrak Intercity, Altamont Commuter Express (ACE), and Capital Corridor all of which operates in Santa Clara County segment.
- B. Mainline - Future Owner Commuter Operations and UPRR freight traffic
1. Owner's and other operator's commuter train traffic may vary in time and frequency over the course of the contract per published revisions to timetables.
 2. UPRR freight traffic is subject to change without notice at the discretion of UPRR.

1.07 SAFETY

- A. Employees of the Contractor scheduled or expected to perform work within Caltrain Property are required to have successfully completed, within the last twelve (12) months, Caltrain's Roadway Worker Protection training program. The Contractor shall forward to Caltrain records of those successfully completing the course.
- B. **Roadway Worker Protection Act:** Contractor shall at all times comply with provisions of the Federal Rail Administration Regulation 49CFR214 (Roadway Worker Protection) as well as to the Permittor (Licensor) On-Track Safety Program.
- C. **Zero Tolerance:** The Caltrain/Amtrak Zero Tolerance Policy is attached and made a part hereof.
- D. The Contractor shall comply with the articles contained in the latest edition of the following publications from the PCJPB or its Operating Railroad of Record (ORR), currently Amtrak:
 - 1. ORR Operating Timetable and Special Instructions
 - 2. ORR General Code of Operating Rules for Maintenance of Way
 - 3. ORR General Orders
 - 4. ORR Maintenance of Way General Orders
 - 5. PCJPB Caltrain On-track Safety Plan
 - 6. PCJPB Passenger Timetable
 - 7. PCJPB Standard Procedures for Track Maintenance and Construction

All publications listed above are available on the Caltrain website, www.caltrain.com, or available upon request from PCJPB. The Contractor shall comply with the more stringent rule when conflicts occur between these publications.

Exhibit C-1

Working Procedures

Permittee shall at all times abide by Railroad's Operating Systems Interface, a copy of which is attached to this Agreement as Exhibit C, as well as with the regulations of Railroad (including, but limited to, Railroad's Track Specifications and Design Guidelines for Grade Separations and Any Other Encroachments, dated July, 1994, as amended, and Railroad's Right of Way Standards for Longitudinal and Transverse Utility Encroachments, dated July, 1994, as amended). Permittee's Work on the Property shall be subject to Railroad's approval. Without limiting the foregoing, Permittee shall at all times comply with the regulations of Railroad and the Operator and the instructions of either of their representatives relating to the proper manner of protecting the tracks, pipelines, wire lines, signals and all other property at said location, the traffic moving on such tracks and the removal of tools, equipment and materials. In addition, Permittee will adhere to the following specific requirements:

(a) Repair and Maintenance. After installation, Permittee shall bear the entire cost of maintaining and operating facilities installed by Permittee on the Property.

(b) Plans Approved Prior to Commencing Work. Permittee's work on the Property shall be performed in accordance with plans and specifications approved in advance and in writing by Railroad as to overall layout, clearances established by the California Public Utilities Commission (including, but not limited to, PUC General Order 26-D), shoring, temporary supports, false work, railroad bridges and any other works on Railroad's Right-of-Way and in such manner and at such times as shall not endanger or interfere with the safe operation of the tracks and other railroad facilities on or adjacent to the Right-of-Way. Any waiver of these standards must be in writing and must be issued by Railroad's Chief Engineer. Any revisions and amendments to the approved plans and specifications pertaining to the Work on the Property must be approved in writing by Railroad. The details of construction affecting the Railroad tracks and property not included in the contract plans shall be submitted to the Railroad for approval before such work is undertaken. All plans and designs related to track rearrangement shall be subject to the prior approval of Railroad. Permittee shall submit to Railroad three (3) sets of working drawings showing details of construction affecting Railroad's tracks and the Property, including those for false work over and/or adjacent to the tracks or shoring of excavations near tracks, not included in the contract plans, and Permittee shall not begin such work until notified by Railroad that such plans have been approved. Railroad's approval for these limited purposes shall not relieve Permittee from liability arising out of performance of the Work or lead to an assumption of design or construction responsibility on the part of Railroad or its Operator. Approval by Railroad shall not constitute a warranty by Railroad that such plans conform to applicable federal, state, and/or local codes and regulations.

(c) Notice Prior to Commencing Work. Permittee shall cooperate with the Railroad and Operator where work is over or under the tracks, or within the limits of the Property, in order to expedite the work and to avoid interference with the operation of Railroad's equipment. Permittee shall notify the Railroad's Chief Engineer at least ten (10) working days (or such additional notice as may be provided herein) before commencing any work on the Property. Although Railroad will reasonably cooperate with Permittee so that the Work may be handled in an efficient manner, Permittee hereby waives and releases Railroad from any claim for damages against Railroad in the event the Work is delayed for any reason whatsoever.

(d) No Interference With Railroad Operations. Permittee shall perform its work in such manner and at such times as shall not endanger or interfere with the safe operation of the tracks and property of Railroad and traffic moving on such tracks, as well as wires, signals, pipelines, utilities and

other property of Railroad, its tenants or licensees, at or in the vicinity of the work. All work contemplated in this Agreement shall be performed in a good and worker-like manner to the satisfaction of the parties, and each portion shall be

promptly commenced by the party obligated to do the same and thereafter diligently prosecuted to completion in its logical order and sequence.

(e) Repair of Damage. Permittee shall take protective measures necessary to keep Railroad's facilities, including track ballast, free of sand or debris resulting from its operations. Any damage to Railroad's facilities resulting from Permittee's operations will be repaired or replaced by Railroad at Permittee's sole cost and expense, which Permittee shall pay to Railroad promptly upon demand therefor.

(f) Underground Facilities. Permittee shall be solely responsible at its own cost for identifying the location of all pipelines (including, but not limited to, high pressure petroleum, gas and water pipelines), fiber optic lines and all other utilities of whatever nature on the Property, and for relocating all said pipelines and utilities which would interfere with Permittee's Work. Permittee shall relocate, or arrange for the relocation by a third-party contractor approved by Railroad, any and all Railroad signal lines and Railroad communication facilities, the existing location of which would interfere with the Work, at Permittee's sole cost and expense, unless other arrangements are made by separate agreement. Absence of markers does not constitute a warranty by Railroad of the absence of subsurface installations. It shall be Permittee's responsibility to determine the existence of any underground facilities and Permittee shall call Underground Service Alert at 1-800-642-2444 prior to beginning any work on the Property. Since there is the possibility of the existence of pipelines or other structures beneath the Property, if Permittee should excavate or drill, then Permittee's forces shall explore such structures with hand tools to a depth of at least eight (8) feet below the surface of the ground or, at Permittee's option, use suitable detection equipment, prior to drilling or excavating with mechanized equipment.

(g) Storage. Permittee shall not pile or store any tools or other materials or park any equipment, when not in use, closer to the center of nearest railroad track than permitted by the following permanent clearances:

- (i) 25'-0" horizontally from center line of track; and
- (ii) 22'-6" vertically above top of rail.

The placement of piles, forms, braces, shoring, falsework or other construction supports shall be in accordance with the current State of California, Department of Transportation (Caltrans) Falsework Manual, PCJPB Standards Volumes 1 and 2, PCJPB Engineering Standards for Excavation Support Systems, and PUC General Orders 26-D and 118 as applicable

Walkways with railings shall be constructed by Permittee over open excavation areas when in close proximity of tracks, and railings shall not be closer than 8'-6" horizontally from centerline of the nearest track, if tangent, or 9'-6" if curved. Any infringement on the above temporary construction clearances due to the Permittee's operations shall be submitted to Railroad for approval, and shall not be undertaken until approved by Railroad. When the temporary vertical clearance is less than 22'-6" above top of rail, Railroad shall have the option of installing tell-tales or other protective devices Railroad deems necessary for protection of Railroad trainmen or traffic. Permittee shall notify the Railroad in writing, at least twenty-five (25) calendar days, but no more than forty (40) calendar days, in advance of the starting date of installing temporary work with less than permanent clearances established above for approval as provided herein.

(h) Open Holes. Any open holes shall be satisfactorily covered at all times when Permittee's forces are not physically working in the vicinity. Upon completion of work, all holes will be filled in to meet the surrounding ground level with clean, compacted, earthen material and the property left in a neat and safe condition reasonably satisfactory to Railroad.

(i) No Crossing of Tracks. Permittee shall not be permitted to cross Railroad's tracks located on or adjacent to the Property without Railroad's prior written approval, which may be conditioned on such terms as Railroad deems appropriate. Absent such approval, Permittee's access shall be by use only of designated public streets or crossings.

(j) Payments and Liens. With respect to the Work, Permittee shall fully pay for all materials joined or affixed to the Property, and shall pay in full all persons who perform labor on or deliver materials to the Property. As Railroad is a public entity, its property is not subject to mechanics' or materialmen's liens, and nothing in this Permit shall be construed to make its property subject to such liens. Nevertheless, if any stop notice claims, mechanics' or materialmen's liens of any kind are filed, Permittee shall immediately remove them at Permittee's own expense, and shall pay any judgment which may be entered. Should Permittee fail, neglect, or refuse so to do, Railroad, after forty-eight (48) hours prior notice to Permittee, shall have the right to pay any amount required to release any such liens, or to defend any action brought, and to pay any judgment entered. Permittee shall be liable to Railroad for all costs, damages, reasonable attorneys' fees, and any amounts expended in defending any proceedings or in the payment of any of said liens or any judgment. Railroad may post and maintain upon the Property notices of non-responsibility as provided by law.

(k) Tests. Permittee shall cooperate with Railroad in making any tests Railroad requires of any installation or condition that in Railroad's reasonable judgment may have an adverse effect on any of the facilities of Railroad. All costs incurred by the tests, or any corrections, shall be borne by Permittee.

(l) Completion. Permittee shall notify Railroad the date said work is completed, and also the date the Permittee's Work is accepted by the Permittee. Upon completion of the work to be done upon Railroad's Property, Permittee shall promptly remove from the Property all tools, equipment and materials placed thereon by Permittee or its agents. Permittee shall restore said property to the same state and condition as when Permittee entered thereon and shall leave said Property in a clean and presentable condition.

(m) Compliance with Laws. Permittee shall comply, at Permittee's expense, with all applicable laws, regulations, rules and orders with respect to the use of the Property, regardless of when they become or became effective, including, without limitation, those relating to construction, grading, signage, health, safety, noise, environmental protection, hazardous materials, waste disposal and water and air quality, and furnish satisfactory evidence of such compliance to Railroad upon request.

(n) Condition of Property. Permittee agrees to keep the Property and the Work in good and safe condition, free from waste, so far as affected by Permittee's operations, to the reasonable satisfaction of Railroad. If, during the term of this Agreement, Permittee fails to keep the Property and the Work in good and safe condition, free from debris, then Railroad may, at Railroad's option (1) perform the necessary work at the expense of Permittee which expense Permittee agrees to pay to Railroad upon demand, and/or (2) immediately terminate this Permit without limiting its remedies. Permittee shall not conduct any activities on or about the Property that constitute a nuisance or unreasonable annoyance (including without limitation, emission of objectionable odors, noises or lights) to Railroad, to the owners or occupants of neighboring property or to the public.

(o) Project Markers. Project markers in a form and size satisfactory to Railroad, identifying the facility and its owner, shall be installed and constantly maintained by and at the expense

of Permittee at Railroad's property lines or such locations as Railroad shall approve. Such markers shall be relocated or removed upon request of Railroad without expense to Railroad. The absence of markers does not constitute a warranty by Railroad that there are no subsurface installations.

(p) Engineering Review. Railroad (or its contractor) shall provide all engineering review, marketing and scheduling, detouring, flagging and engineering inspection required in connection with said Work, as determined by Railroad in its reasonable discretion, at Permittee's sole cost and expense.

(q) Reimbursement. Permittee agrees to reimburse Railroad for the actual cost and expense to Railroad of furnishing any materials or performing any labor in connection with the Work, including, but not limited to, the review of plans and specifications, the installation and removal of any false work or other protection beneath or along railroad tracks, and the furnishing of such security persons, flaggers and inspectors

as Railroad deems necessary. Flaggers and/or inspectors are required when work is performed in proximity to the tracks and are furnished at the cost of approximately \$1,300 per day for inspectors and \$1,200 per day for flaggers.

(r) Delay Damages. In the event that Permittee's acts or omissions cause delays to Railroad's commuter train operations, the Railroad will sustain damages, and it is agreed by the parties that it is impracticable and extremely difficult to ascertain and determine the actual damages which Railroad will incur in the event of and by reason of such delay. The charges cover such costs as: 1) Additional train crew labor costs; 2) Additional Railroad inspector costs; 3) Costs of establishing any bus bridges; 4) Lost passenger revenues; and 5) Customer rebate costs.

Minor Train Delay Liquidated Damages Charges

Maximum Delay Per Train Per Day (minutes)	Charges Per Weekday or Weekend Day
0'00"-1'00"	\$ 0
1'01"-2'00"	\$ 2,500
2'01"-5'00"	\$ 6,500
5'01"-10'00"	\$13,000
10'01"-15'00"	\$20,000

Major Train Delay Liquidated Damage Charges

Number of Trains Delayed

More Than 15 Minutes in

<u>Any Calendar Month</u>	<u>Charge Per Train</u>
1-2	\$20,000
3-4	\$40,000
5-6	\$60,000
7 or More	\$80,000

Permittee shall pay to Railroad the sums set forth above within forty-five (45) days of receipt of invoice from Railroad.

(s) No Blasting. Permittee shall not conduct any blasting on the Property without the prior written authorization of Railroad.

(t) Workplace Safety. Permittee shall at all times comply with the provisions of the Federal Railroad Administration regulations, including 49 CFR Part 214, pertaining to Railroad Workplace Safety, and Railroad's On-Track Safety Program.

(u) Conflict with Operating Systems Interface. To the extent any of the foregoing specific requirements of this exhibit conflict with provisions set forth in the Operating Systems Interface and Track Specifications and Design Guidelines for Grade Separations, the provisions of Operating Systems Interface and Track Specifications and Design Guidelines for Grade Separations shall control.

(v) Protection of Railroad Facilities. The presence of Railroad's representatives, conductors, inspectors, flagmen or watchmen may be required when Permittee or any of Permittee's forces or contractors are working on or near the Property and will be provided by Railroad to protect its facilities, property and movements of its trains or engines. In general, Railroad will furnish such personnel or other protective devices: (1) When any part of any equipment is standing or being operated within fifteen (15) feet, measured horizontally, from the closest edge of the closest rail of any track on which trains may operate, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track. (2) For any excavation below elevation or track sub-grade if, in the opinion of Railroad's representative, track or other Railroad facilities may be subject to settlement or movement. (3) For any clearing, grubbing, grading, or blasting which, in the opinion of Railroad's representative, may endanger Railroad facilities or operations.

Permittee specifically agrees that the need for and staffing of Railroad personnel or those of its Operator as provided in this Section shall be within Railroad's sole discretion, and the attendant costs shall be borne entirely by the Permittee. The reasonable cost to Permittee of such inspector shall be payable to Licensor within thirty (30) days after presentation of a bill.

(w) Fiber optics. In addition to other provisions of this Agreement requiring Permittee to give notice prior to commencing work, Permittee shall telephone Underground Service Alert at 1-800-642-2444 (a 24-hour number) to determine if a telecommunications system is buried anywhere on or about the Property. If there is, Permittee will telephone the owner of any system identified, arrange for a cable locator and make arrangements for relocation or other protection for the system prior to beginning any work on the Property.

(x) Weekly Site Specific Work Plan. Prior to commencing the Work, and each week during the core of conducting the Work, Permittee shall have a Weekly Site Specific Work Plan approved by the Permittee. If such a plan is not approved by Railroad, or not available on site, Permittee may cancel this Agreement.

(y) Traffic. Permittee shall provide all barriers, directions, signage and other forms of notice to the public to assure the smooth and uninterrupted flow of traffic around the Property.

